

# IMPORTANT SAFETY INSTRUCTIONS

- Install the Over-the-Air Module with care. Be sure not to drop any loose parts in the opening.
- Do not insert anything into the opening on the receiver other than the Over-the-Air Module.
- Be aware that there may be parts or areas of the receiver inside the opening that are warm.
- If the Over-the-Air Module is removed, be sure to replace the port cover that came with the receiver. Do not leave the opening uncovered at any time.

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# INTRODUCTION

The MT2 Over-the-Air (OTA) Module allows you to add two digital over-the-air tuners to your satellite receiver. This provides the ability to integrate over-the-air channels into the on-screen Program Guide of compatible receivers for seamless viewing by both the TV1 and TV2 viewers. If your satellite receiver is a DVR (digital video recorder), using this module will also allow you to record digital over-the-air broadcasts.

In addition, the MT2 OTA Module adds a Channel 3-4 coax output, for connection to standard-definition TVs.

## INSTALLATION AND SETUP

### Installation Considerations

- The OTA Module is compatible with only specific receiver models. Refer to your receiver's User Guide to determine if your receiver model can use the module.
- The OTA Module is capable of receiving only digital over-the-air broadcasts, not analog.
- These instructions assume that your satellite receiver is already connected to a dish antenna, and has the most current software. If not, you must connect the satellite receiver to your dish antenna and download current software, using the instructions included with those pieces of equipment.
- A DISH Network programming subscription is required to receive over-the-air channels using the OTA Module.
- The OTA Module does not provide pass-through of analog OTA signals.

- These instructions assume you have an over-the-air antenna suitable for your area already installed in your system. Refer to [www.antennaweb.org](http://www.antennaweb.org) or a local retailer for assistance in choosing and peaking an over-the-air antenna.

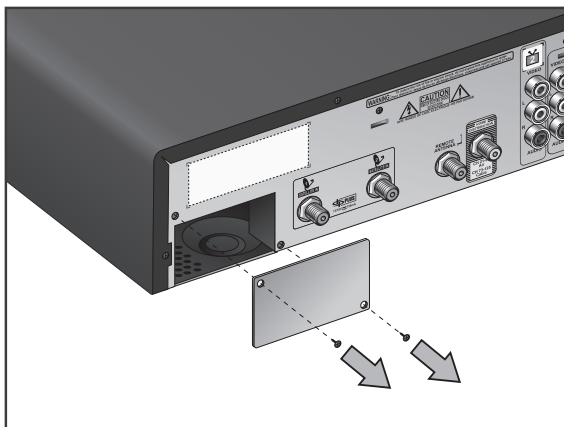
## Installing the MT2 Module

1. Unplug the receiver's power cord from the electrical outlet.



Unplug the receiver's power cord from electricity anytime you install or remove the OTA module. Doing so reduces the danger of electrical shock, which could damage the module and the receiver, and injure or kill you.

2. Look at the back panel of your satellite receiver, and locate the cover on the left side of the back panel. Remove the two screws attaching the cover to the receiver (see Figure 1). Keep the screws for use in installing the module.



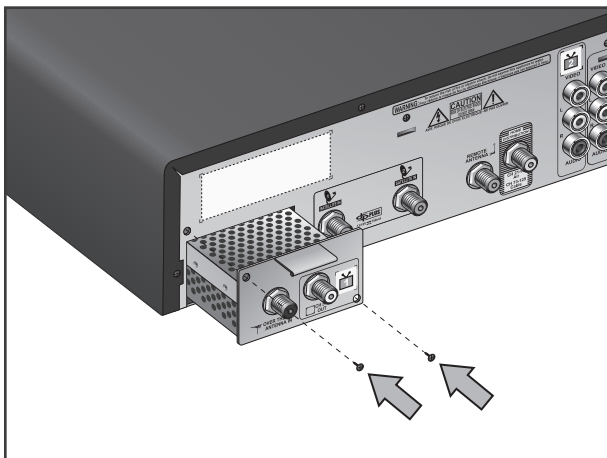
**Figure 1. Removing the Cover**



The module port on the back of the satellite receiver must be covered if an OTA Module is not installed. Damage to an uncovered module port is not covered by the receiver's *Limited Warranty*.

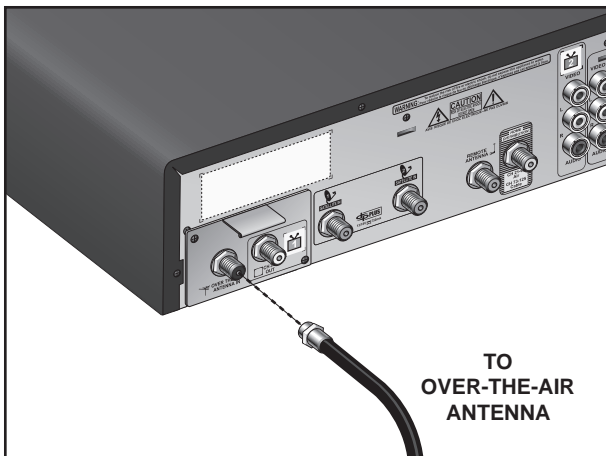
3. Install the module into the module port, making sure the labeling on the module is right-side up. Attach the module using the two cover screws (see Figure 2).

**Note:** Save the module port cover in case you need to remove the module and cover the port in the future.



**Figure 2. Installing the MT2 OTA Module**

4. Connect the cable from your over-the-air antenna to the **OVER-THE-AIR ANTENNA IN** port on the module (see Figure 3). Only one cable is needed because the module has an internal splitter to provide the dual-OTA tuner capability.



**Figure 3. Connecting the Over-the-Air Antenna**

5. Plug the receiver's power cord into the electrical outlet. Turn the receiver back on after it has reset itself.

## Setting up the Receiver to Display OTA Channels

1. Using the remote control, press **MENU**, select **System Setup**, then **Local Channels**.

**Note:** Your Local Channels screen may differ slightly.



**Figure 2. Local Channels Screen**

2. Scan for channels by selecting **Scan Locals**.  
**Note:** Ensure the Analog Type on the HDTV Setup menu (accessed by **MENU**, **System Setup**, then **HDTV Setup**) is set to **Offair**.
3. The scan takes a few minutes to complete. If you want to stop the scan before it is completed, select **Cancel**. When the scan completes, the results show how many digital over-the-air channels were found.
4. Select **OK** to go back to the Local Channels screen and view the list of channels.
5. If you want to name the over-the-air channels, follow the steps below. Otherwise, select **Done** to save the channel list.

6. Select a channel and then select **Edit Name** to change the way the channel name displays in the Program Guide and other channel lists. You can rename only one channel at a time.
7. Use the on-screen keyboard to enter the channel name.
8. Select **Done** when you are finished making changes.

## Viewing Your OTA Channels

The over-the-air channels that are scanned into the receiver using the previous steps can be viewed in the on-screen Program Guide below channel 100. The OTA channels are listed in yellow in the Program Guide.

**Note:** You will need to have satellite signal and subscribe to DISH Network programming to view channels received using the OTA Module. Guide information for over-the-air channels displays only if you are subscribed to DISH Network local channels.

## CONNECTING TO A TV USING THE CHANNEL 3-4 OUTPUT

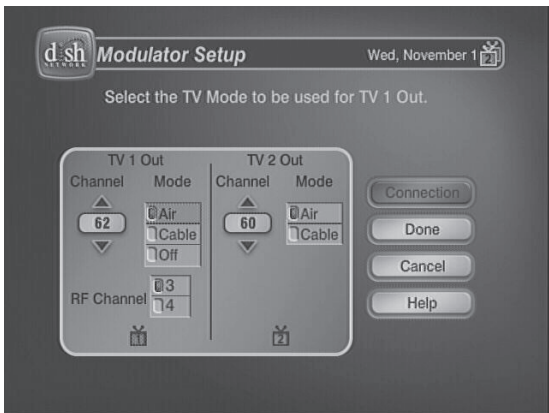
Use the **CH 3-4 OUT** connection to connect to a nearby TV using coax cable. The TV connected to the Channel 3-4 output views the same programming as your TV1 viewing location. Refer to your receiver User's Guide for more details on the TV1 viewing location.

1. Install the module into the receiver using the instructions on page 3.
2. Connect one end of a coax cable to the **CH 3-4 OUT** connection of the module.
3. Connect the other end of the coax cable to a coax connection on your TV. This connect may be labeled **ANTENNA IN**, **CABLE IN**, or a



a similar name. Refer to your TV's User Guide for help locating this connection.

- Using the satellite receiver's remote control, press **MENU**, select **System Setup, Installation**, then **Modulator Setup**.



**Figure 3. Modulator Setup**

- Under TV1 Out, select Channel 3 or 4. Set the channel on the TV connected to the **CH 3-4 OUT** output to match this setting.
- Select **Done** to save your changes.

# REMOVING THE OTA MODULE

Do not remove the OTA Module unless necessary as you will no longer be able to tune to your over-the-air channels if the module is removed.

1. Unplug the receiver's power cord from the electrical outlet.
2. Disconnect any cables connected to the module's **OVER THE AIR ANTENNA IN** port and/or **CH 3-4 OUT** port.
3. Remove the screws connecting the module to the receiver's back panel. Gently remove the module.
4. Replace the module port cover and attach it to your receiver using the screws that had connected the module.
5. Plug the receiver's power cord into the electrical outlet, and turn it back on.
6. Store the OTA Module in the original box when it is not installed in the receiver.

# TROUBLESHOOTING

## The receiver does not detect that the OTA Module is installed

1. The receiver will display that the OTA Module is detected on the System Info Three screen. Using the DISH Network remote control, press **MENU**, select **System Setup**, then **Installation**, then **System Info**. Select **Next** until the System Info Three screen displays, and verify the module is listed on this screen.
2. Ensure you have installed the module correctly using the instructions on page 3.
3. Try resetting the receiver by pressing the **RESET** button on the receiver's front panel. The receiver will reset and should return to programming in a few minutes.
4. Verify your receiver has the most current software version. Refer to [www.dishnetwork.com](http://www.dishnetwork.com), select Customer Service, then Tech Support to look up the current software version for your receiver.
5. Remove the module, using the instructions on page 9, then re-install it using the instructions on page 3.

## You are not receiving some or all of the over-the-air channels you expect

**Note:** If you have questions about over-the-air channels, contact the local broadcaster, not DISH Network.

1. Use [www.antennaweb.org](http://www.antennaweb.org) or contact a local retailer to verify the over-the-air antenna you have installed is suitable for use in your area and for the channels you want to receive.
2. Ensure the over-the-air antenna is connected to the **OVER-THE-AIR ANTENNA IN** port on the OTA Module.

3. Verify the module is installed correctly. Refer to the instructions on page 3.
4. Verify that the antenna is installed correctly and peaked for the desired channels.

# ABOUT OVER-THE-AIR TV BROADCASTS

Over-the-air TV signals are broadcast by local TV stations from a transmitter tower, and are received using an indoor or outdoor antenna. Digital over-the-air TV broadcasting uses advanced technology to deliver superb picture quality and CD-quality sound. However, digital over-the-air reception depends on several factors:

- The distance between the broadcast station and your home—the farther away the station, the weaker the signal.
- The broadcast station's power—the lower the power, the weaker the signal.
- Obstacles between the station and your home, such as mountains, buildings, trees, or other objects—these may block or reflect the signal before it reaches you.
- Multiple broadcast stations—to receive good signals from several stations, you may need to compromise how the antenna is pointed, or you may need more than one antenna.

There is no guarantee of reception of digital over-the-air channels by using the OTA Module; however, using the best over-the-air antenna for your area will improve your chances of reception:

- You can typically receive a limited number of channels using a rabbit ears-type antenna, or a much larger number using a UHF/VHF outdoor antenna.
- The higher the quality of antenna you use, the greater its range and the better its reception will be.
- Refer to [www.antennaweb.org](http://www.antennaweb.org), a website run by the Consumer Electronics Association, for recommendations for antenna types and pointing directions.

## Installation Considerations

- Follow local, state, and *National Electric Code* requirements for grounding the over-the-air antenna.
- RG-6 coaxial cable is preferred for the **OVER THE AIR ANTENNA IN** connection. If you are diplexing the **OVER THE AIR ANTENNA IN** and **SATELLITE IN** cables, RG-6 cable must be used.
- You cannot use a diplexer to combine the **OVER THE AIR ANTENNA IN** and **SATELLITE IN** cables if using an amplified antenna.
- Reception of digital over-the-air broadcasts is outside of the control of DISH Network. If you have questions about over-the-air broadcasts, contact the broadcaster, not DISH Network.

## Digital Transition Consideration

Although all full-power over-the-air stations are transitioning to digital-only broadcasts beginning February 17, 2009, there will be some broadcasters who will continue using analog signals after this date. Because the OTA Module includes digital-only tuners, stations that are still broadcasting analog signals cannot be received using this module.

## Limited Warranty

This Limited Warranty is a legal document. Keep it in a safe place. Remember to keep your Sales Receipt for warranty service. We will consider any items you return without a copy of the Proof of Purchase to be out of warranty.

This warranty extends only to the original user ("you," "your") of the DISH Network Over-the-Air Module and is limited to the purchase price of the module. DISH Network Corporation and its affiliated companies ("we," "our," "us") warrant this module against defects in materials or workmanship as follows. For one year from the original date of purchase, if we find the module is defective subject to the limits of this warranty, we will replace the module at no charge for parts or labor. We warrant any such work done against defects in materials or workmanship for the remaining part of the original warranty period. This warranty does not cover installation of the DISH Network System; consumer instruction; physical set up or adjustment of any consumer electronic equipment; remote control batteries; signal reception problems; loss of use of the equipment; unused programming charges due to equipment malfunction; cosmetic damage; damage due to lightning, electrical or telephone line surges, fire, flood, or other acts of Nature; accident; misuse; abuse; repair or alteration by other than our factory service; negligence; commercial or institutional use; improper or neglected maintenance; equipment sold AS IS or WITH ALL FAULTS; equipment removal or reinstallation; shipping damage if the equipment was not packed and shipped in the manner we prescribe; nor equipment purchased, serviced, or operated outside the contiguous United States of America. REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. WE SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY ON THIS DEVICE, NOR FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE RESULTING FROM THE USE OF, OR INABILITY TO USE, THIS DEVICE. UNDER NO CIRCUMSTANCES SHALL OUR LIABILITY, IF ANY, EXCEED THE PURCHASE PRICE PAID FOR THIS DEVICE. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS DEVICE IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. WE RESERVE THE RIGHT TO REFUSE TO HONOR THIS WARRANTY IF WE DETERMINE ANY OF THE ABOVE EXCEPTIONS TO HAVE CAUSED THIS DEVICE NOT TO HAVE PERFORMED PROPERLY. THIS WARRANTY SHALL BE VOID IF ANY FACTORY-APPLIED IDENTIFICATION MARK, INCLUDING BUT NOT LIMITED TO SERIAL OR

CONDITIONAL ACCESS NUMBERS, HAS BEEN ALTERED OR REMOVED. THIS WARRANTY SHALL ALSO BE VOID IF THE DEVICE HAS BEEN OPENED BY AN UNAUTHORIZED PERSON.

This warranty gives you specific legal rights which may vary from state to state. Some states do not allow the exclusion or limitations of incidental or consequential damages, or allow limitations on the duration of an implied warranty, so those limitations may not apply to you.

## **DISH Network's Exchange Programs**

DISH Network offers two options if you need to replace your accessories; the Advance Exchange Program and the Post Receipt Exchange Program

### **Advance Exchange Program**

The Advance Exchange Program allows you to have replacement equipment shipped immediately to you (depending upon where you live, it could take three to five business days). Along with replacement equipment, you will receive a prepaid shipping label and instructions on how to return the defective equipment. The shipping charge, for receiving replacement equipment and returning the defective equipment, is a one time fee based on EchoStar's competitive bulk shipping rates (additional charges may apply outside of the continental US). This fee will be charged to your billing account or your valid credit card. If you do not ship the defective equipment to EchoStar within ten days after receiving the replacement, your billing account or credit card will be charged the market price of the replacement. If you return the defective equipment after ten days, you will receive a full refund less an administrative fee.

If your equipment is out of warranty and can be repaired your billing account or credit card will be charged the standard repair fee for the replacement. If damage to the defective equipment is found, which EchoStar in its sole discretion determines has voided the warranty, or makes the equipment unrepairable, your billing account or credit card will be charged the market price of the replacement.

### **Post Receipt Exchange Program**

You may choose to ship the equipment to us at your cost. To provide faster service, upon receipt of your equipment you will be shipped a replacement. Your original equipment will not be available for return. The equipment you return will be checked to verify whether it is covered under this warranty. If the defective equipment is covered under this warranty, it will be replaced and shipped back to you at no additional cost (additional charges may apply outside of the continental US). If your equipment is out of warranty and can be repaired your billing account or credit card will be charged the standard repair fee for the replacement. If damage to the defective equipment is found, which EchoStar in



its sole discretion determines has voided the warranty, or makes the equipment unreparable, your billing account or credit card will be charged the market price of the replacement.

## **Accessory Warranty**

An accessory is any DISH Network branded equipment, displaying the DISH Network logo, excluding the receiver, Smart Card, cables and hookups, and non-mechanical components. A one-year warranty becomes effective upon the activation of the DISH system or date of purchase, if bought separately. A proof of purchase is required to verify the purchase date. If an accessory has an expired warranty, no exchange will be issued. You may purchase replacement accessories from DISH Network or your local retailer.

## **If You Need Help**

1. Review this User Guide.
2. See the *Troubleshooting* section of these Installation Instructions.
3. Visit us online at <http://tech.dishnetwork.com> or call the Customer Service Center at 1-800-333-DISH (3474). Have the date of purchase and your customer account number ready.
  - a. If the representative finds you should return the module, you'll get a telephone number to call for a Return Authorization (RA) number. Before shipping any equipment to us, you must get a Return Authorization number.
  - b. You must package returned equipment the right way. Follow the instructions the representative gives you.
  - c. Write the RA number in large, clearly visible characters on the outside of the shipping box used to return the equipment. To avoid confusion and misunderstandings, we will return shipments without an RA number clearly visible on the outside of the box to you at your cost.
  - d. We will:
    - Check the module, including whether it is covered under the warranty.
    - Replace any module we find is defective with a new or refurbished module.
    - If the defective module is covered under the warranty, we will ship the replacement module at our expense. If a defective module is not covered under the warranty, we will tell you. We may assess you a flat rate charge for a replacement module, including shipping and insurance.



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Send any comments or questions about these Installation Instructions to: *techpubs@echostar.com* or *Technical Publications, EchoStar Technologies L.L.C., 94 Inverness Terrace East Englewood, Colorado 80112*

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